

IN THE CLAIMS:

Please cancel claims 12-15, 26, 27, and 39-42 without prejudice or disclaimer as to the subject matter contained therein.

Please amend the claims as shown in the following claims listing.

1. (Currently amended) A system, comprising:
an inter-node network; and
a plurality of nodes coupled by the inter-node network, wherein each of the plurality of nodes includes a plurality of active devices, an interface configured to send and receive coherency messages on the inter-node network, and an address network coupling the plurality of active devices to the interface;
wherein an active device included in a node of the plurality of nodes is configured to initiate a write back transaction involving a coherency unit by sending either a first type of remote write back (RWB) address packet on the address network if the active device is included in a multi-node system, [[or]] and a second type of write back (WB) address packet on the address network dependent on whether if the active device is included in a multi-node system a single node system;
wherein each active device included in the node having access to or ownership of the coherency unit is configured to ignore the RWB address packet; and
wherein if the active device sends the RWB address packet and another active device included in the node requests and gains ownership of the coherency unit before an interface included in the node sends a responsive address packet in response to a coherency request by a home node, the another active device is configured to provide data to the interface in response to the responsive address packet.

2. (Currently amended) The system of claim 1, ~~wherein the first type of address packet is a remote write back (RWB) address packet and the second type of address packet is a write back (WB) address packet, wherein the active device is configured to send the RWB address packet if the active device is included in a multi-node system, and wherein each active device included in the node having access to or ownership of the coherency unit is configured to ignore the RWB address packet;~~

wherein each active device included in the node having access to or ownership of the coherency unit is configured to transition an access right to or an ownership responsibility for the coherency unit in response to the ~~second type of WB~~ address packet.

3. (Currently amended) The system of claim [[2]] 1, wherein the active device is configured to send the RWB address packet if the active device is included in a multi-node system and if the coherency unit is not mapped by any memory subsystem included in the node.

4. (Original) The system of claim 3, wherein an interface included in the node is configured to send a coherency message via the inter-node network to a home node for the coherency unit in response to receiving the remote write back address packet, and wherein each active device included in the node is configured to ignore the remote write back address packet.

5. (Original) The system of claim 4, wherein a home interface in the home node is configured to lock the coherency unit in response to the coherency message and to responsively send an additional coherency message requesting initiation of a proxy read-to-own-modified subtransaction to the interface in the node.

6. (Original) The system of claim 5, wherein in response to receiving the additional coherency message, the interface in the node is configured to send a proxy read-to-own-modified address packet on the address network.

7. (Original) The system of claim 6, wherein each active device included in the node having an access right to the coherency unit and not having an ownership responsibility for the coherency unit is configured to invalidate the access right in response to the proxy read-to-own modified address packet.

8. (Original) The system of claim 6, wherein the active device is configured to transition an ownership responsibility for the coherency unit upon receipt of the proxy read-to-own modified address packet and to responsively send a data packet corresponding to the coherency unit to the interface.

9. (Original) The system of claim 8, wherein the active device is configured to transition an access right corresponding to the coherency unit upon sending the data packet.

10. (Currently amended) The system of claim 2, ~~wherein the active device is configured to send the RWB address packet if the active device is included in a multi-node system and the WB address packet if the active device is included in a single node system;~~

~~wherein if the active device sends the RWB address packet and another active device included in the node gains ownership of the coherency unit before an interface included in the node sends a responsive address packet, the other active device is configured to provide data to the interface in response to the responsive address packet;~~

wherein if the active device sends the WB address packet and the ~~other~~ another active device included in the node gains ownership of the coherency unit before a memory subsystem included in the node sends a different responsive address packet, the active device is configured to send a NACK data packet to the memory subsystem.

11. (Original) The system of claim 1, wherein the active device includes a mode register configured to store a value indicating whether the active device is included in a multi-node system.

12-15. (Canceled)

16. (Currently amended) A node, comprising:

a plurality of devices coupled by an address network, wherein the plurality of devices includes an active device and an interface configured to communicate via an inter-node network coupling additional nodes in a multi-node system;

wherein the active device is configured to initiate a write back transaction involving a coherency unit by sending either a first type of remote write back (RWB) address packet on the address network if the active device is included in a multi-node system, [[or]] and a second type of write back (WB) address packet on the address network dependent on whether if the active device is included in a multi-node system or a single node system; wherein each active device included in the node having access to or ownership of the coherency unit is configured to ignore the RWB address packet; wherein if the active device sends the RWB address packet and another active device included in the node requests and gains ownership of the coherency unit before the interface sends a responsive address packet in response to a coherency request by a home node, the another active device is configured to provide data to the interface in response to the responsive address packet.

17. (Currently amended) The node of claim 16, wherein the first type of address packet is a remote write back address (RWB) packet and the second type of address packet is a write back (WB) address packet, wherein the active device is configured to send the first type of address packet if the active device is included in a multi-node

~~system, and wherein each active device included in the node having access to or ownership of the coherency unit is configured to ignore the RWB address packet;~~

wherein each active device included in the node having access to or ownership of the coherency unit is configured to transition an access right to or an ownership responsibility for the coherency unit in response to the WB address packet.

18. (Currently amended) The node of claim [[17]] 16, wherein the active device is configured to send the remote write back address packet if the active device is included in a multi-node system and if the coherency unit is not mapped by any memory subsystem included in the node.
19. (Original) The node of claim 18, wherein the interface is configured to send a coherency message via the inter-node network to a home node for the coherency unit in response to receiving the remote write back address packet, and wherein each active device included in the node is configured to ignore the remote write back address packet.
20. (Original) The node of claim 19, wherein in response to receiving a responsive coherency message from the home node for the coherency unit, the interface in the node is configured to send a proxy read-to-own-modified address packet on the address network.
21. (Original) The node of claim 20, wherein each active device included in the node having an access right to the coherency unit and not having an ownership responsibility for the coherency unit is configured to invalidate the access right in response to the proxy read-to-own modified address packet.
22. (Original) The node of claim 20, wherein the active device is configured to transition an ownership responsibility for the coherency unit upon receipt of the proxy

read-to-own modified address packet and to responsively send a data packet corresponding to the coherency unit to the interface.

23. (Original) The node of claim 22, wherein the active device is configured to transition an access right corresponding to the coherency unit upon sending the data packet.
24. (Currently amended) The node of claim [[17]] 16, ~~wherein the active device is configured to send the RWB address packet if the active device is included in a multi-node system and the WB address packet if the active device is included in a single node system;~~
~~wherein if the active device sends the RWB address packet and another active device included in the node gains ownership of the coherency unit before the interface sends a responsive address packet, the other active device is configured to provide data to the interface in response to the responsive address packet;~~

wherein if the active device sends the WB address packet and the ~~other~~ another active device included in the node gains ownership of the coherency unit before a memory subsystem included in the node sends a different responsive address packet, the active device is configured to send a NACK data packet to the memory subsystem.

25. (Original) The node of claim 16, wherein the active device includes a mode register configured to store a value indicating whether the active device is included in a multi-node system.

26-27. (Canceled)

28. (Currently amended) A method of operating a multi-node system comprising a plurality of nodes coupled by an inter-node network, wherein each of the plurality of nodes includes a plurality of active devices, an interface configured to send and receive coherency messages on the inter-node network, and an address network coupling the plurality of active devices to the interface, the method comprising:
- an active device included in a node of the plurality of nodes detecting whether the active device is included in a multi-node system or a single node system;
- [[and]]
- an active device included in a node of the plurality of nodes initiating a write back transaction involving a coherency unit by sending either a first type of remote write back (RWB) address packet on the address network in response to detecting the active device is included in a multi-node system, [[or]] and a second type of write back (WB) address packet on an address network included in the node dependent on said in response to detecting the active device is included in the single node system;
- each active device included in the node having access to or ownership of the coherency unit ignoring the RWB address packet; and
- if the active device sends the RWB address packet and another active device included in the node requests and gains ownership of the coherency unit before an interface included in the node sends a responsive address packet in response to a coherency request by a home node, the another active device providing data to the interface in response to the responsive address packet.
29. (Currently amended) The method of claim 28, wherein the first type of address packet is a remote write back (RWB) address packet and the second type of address packet is a write back (WB) address packet, and wherein the active device sends the RWB address packet if the active device is included in a multi-node system, the method further comprising:
- each active device included in the node having access to or ownership of the coherency unit ignoring the RWB address packet; and

each active device included in the node having access to or ownership of the coherency unit transitioning an access right to or an ownership responsibility for the coherency unit in response to the WB address packet.

30. (Currently amended) The method of claim [[29]] 28, further comprising:

the active device sending the RWB address packet if the active device is included in a multi-node system and if the coherency unit is not mapped by any memory subsystem included in the node.

31. (Original) The method of claim 30, further comprising:

an interface included in the node sending a coherency message via the inter-node network to a home node for the coherency unit in response to receiving the remote write back address packet; and

each active device included in the node ignoring the remote write back address packet.

32. (Original) The method of claim 31, further comprising a home interface in the home node locking the coherency unit in response to the coherency message and responsively sending an additional coherency message requesting initiation of a proxy read-to-own-modified subtransaction to the interface in the node.

33. (Previously presented) The method of claim 32, further comprising the interface in the node sending a proxy read-to-own-modified address packet on the address network in response to receiving the additional coherency message.

34. (Original) The method of claim 33, further comprising each active device included in the node having an access right to the coherency unit and not having an ownership responsibility for the coherency unit invalidating the access right in response to the proxy read-to-own modified address packet.

35. (Original) The method of claim 33, further comprising the active device transitioning an ownership responsibility for the coherency unit upon receipt of the proxy read-to-own modified address packet and responsively sending a data packet corresponding to the coherency unit to the interface.
36. (Previously presented) The method of claim 35, further comprising the active device transitioning an access right corresponding to the coherency unit upon sending the data packet.
37. (Currently amended) The method of claim 29, further comprising:
~~the active device sending the RWB address packet if the active device is included in a multi node system and the WB address packet if the active device is included in a single node system;~~
~~if the active device sends the RWB address packet and another active device included in the node gains ownership of the coherency unit before an interface included in the node sends a responsive address packet, the other active device providing data to the interface in response to the responsive address packet;~~
if the active device sends the WB address packet and the ~~other~~ another active device included in the node gains ownership of the coherency unit before a memory subsystem included in the node sends a different responsive address packet, the active device sending a NACK data packet to the memory subsystem.
38. (Original) The method of claim 28, further comprising a mode register included in the active device storing a value indicating whether the active device is included in a multi-node system.

39-42. (Canceled)